

**U.S. Army Corps of Engineers
Fiscal Year 2016
Handshake Program Application**

Please review instructions before completing application!

Corps Lake/River Project Name: **Carlyle Lake Project Office**

District / Division: **MVS / MVD**

Handshake Proposal Title: **Fisheries Habitat Improvement at James Hawn Access Area**

Corps POC Name: **Robert Wilkins**

Telephone: **(618) 594 - 2484** ext.

E-Mail: **Robert.Wilkins@usace.army.mil**

A. Checklist:

1. Will the Handshake funds be spent on Corps facilities and resources that are being fully maintained by the Corps? Yes No
 2. Will the Challenge Partnership agreement be with a non-federal public or private entity(ies)? Yes No
 3. Is the proposed activity within current authorities and contained in the annual or 5-year work plan in the approved lake project OMP? Yes No
 4. Have all of the NEPA requirements been considered for this project? Yes No
 5. Did you participate in a Handshake Webinar in 2015 or review a 2015 Handshake Webinar on the Gateway? Yes No
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B. Handshake Funding Request (maximum \$30,000): \$20,000

C. Cooperating Association Agreement Bonus: Challenge Partnerships that include a Cooperating Association with which your project/district has entered into a Cooperating Association Agreement are eligible to compete for an additional \$5000. Do NOT include a copy of that agreement with this application. A copy may be requested if not already provided to the Partnership Team. (Reference Chapter 9 of ER and EP 1130-2-500 for information on cooperating associations).

This application qualifies for the Cooperating Association Bonus funding.

D. Incentive Points Category: Check the appropriate box if your application qualifies to receive bonus points on the evaluation score. The first category is for the partner contribution meeting or exceeding 70% of total project costs. A summary of the partners' contribution to the Handshake Project should be included in the financial worksheet below. The second category is for Lake or River Projects that have never been chosen as Handshake recipients.

Partner contribution total is 70% or greater (100 points).

This Lake/River Project has never received Handshake funding (100 points).

E. Describe your partnership and the proposed project:

Your project will be evaluated on the following categories: Sustainability, Partnership Value, Recreation Benefit, Environmental Stewardship Benefit, Communication and Education Value, and Innovativeness. Please address each in your description.

Summary Statement of Handshake Project:

Grant funding would support the improvement of fisheries habitat and complement the operation of the existing brood pond facilities at the James Hawn Brood Pond Access Area. The brood pond is managed in cooperation with the Illinois Department of Natural Resources Department of Fisheries to raise game fish species (black and white crappie) to be released in Carlyle Lake. Each year approximately 200,000 fish (3-5 inches) are raised in the pond and released in the lake to help sustain the lake's crappie population.

Over the past 15 years, the area adjacent to the brood pond has greatly deteriorated due to high water events. These high water events have caused erosion and siltation that has resulted in shallow water levels adjacent to the brood pond even when the lake is at normal pool. The deteriorated habitat and shallow water levels has had a negative impact on the survival rate of fingerling fish as they struggle in their journey to deeper water. The deeper water is critical to survival because it is more oxygenated in the main lake area. Many do not survive this journey due to poor water quality and predation. Having a properly functioning brood pond system at Carlyle Lake is vital to mitigate the adverse effects on natural fish spawning in Carlyle Lake due to fluctuating lake levels.

Improvements to the area adjacent to the brood pond would include: excavation of the area adjacent to the brood pond outfall structure, excavation of two channels approximately 200 yards by 20 feet wide by eight feet deep, and construction of three small habitat islands (20 feet in diameter) armored with 50lb. rip rap. In addition, habitat improvements will include placing of artificial fish structures, planting of aquatic vegetation, and planting of willow and cypress trees. This will provide shelter and habitat for young fingerling fish and decrease the chances of predation. All of these improvements will contribute to greater survival rates of fingerling fish released from the brood pond. Habitat improvements will also give fingerling fish a stress free route to deeper water while providing shelter from predators. Helping to sustain and increase Carlyle Lake's crappie population.

Longevity / Sustainability:

The fisheries habitat improvement project will have a life expectancy of more than 15 years. All of the materials that will be used are highly durable and will need little to no maintenance after initial work has been completed. Excavated areas will be armored with rip rap to ensure a long lifespan and prevent any future damage during high water events. To reduce shoreline erosion and siltation aquatic vegetation will be planted and rip rap placed in excavated areas. These improvements will also promote the growth of native wetland plants and improve water quality. Transforming degraded habitat into a healthy and sustainable area for years to come.

Partnership Value:

The Carlyle Lake Project has gathered a unique network of seven partners that will offer an extraordinary value for the handshake dollars applied. The handshake grant would provide \$20,000 in funding for materials, supplies, and equipment for the project. Staff from Carlyle Lake and Illinois Department of Natural Resources will continue a successful partnership providing oversight, development input, design consultation and construction support to the proposed project. Valuable support will also be provided through volunteer labor from two local high schools and a local university fishing team. Student volunteers have a vested interest in fish population at Carlyle Lake because of their personal connection to the lake. These students use the lake for recreational purposes and to host invitational fishing tournaments annually. All partners involved are contributing to an area that impacts and is important to their everyday lives. This project will not only benefit the partners involved, but all of the individuals that visit Carlyle Lake.

Recreational Benefit:

Enhancing the habitat in the James Hawn Brood Pond Access Area will help to sustain current recreational opportunities at Carlyle Lake using innovative features and techniques that have never been applied in the fisheries plan. With over 26,000 acres of surface water, Carlyle Lake is the largest man-made lake in Illinois with over 2.5 million visitors spending over \$70 million annually. A majority of these visitors are anglers who visit during the peak recreation season timeframe, April – October. Carlyle Lake is a popular destination for crappie fisherman in the region. Consequentially, the number of anglers visiting Carlyle Lake has also increased. In 2010, the daily creel limit for crappie was increased from 10 to 15 fish daily with a minimum length of 10 inches. With the increase in creel limits and the influx in the population of black and white crappie, the popularity of crappie fishing at Carlyle Lake has continued to grow.

To ensure recreational anglers continue to enjoy fantastic fishing for many years to come at Carlyle Lake, it is imperative that the James Hawn Brood Pond function properly. Currently, brood pond production averages more than 200,000 fingerling crappie released into Carlyle Lake each year. The proposed habitat improvements will ensure the crappie population released into the lake increases each year; providing fishermen more recreational opportunities at Carlyle Lake.

Environmental Stewardship Benefit:

The habitat improvement this project entails will not only increase fish recruitment from the brood pond, but will also support and attract native species to the area. Fish species that are attracted will utilize it as a spawning area during the spring months. Due to pool fluctuation the addition of sustainable structures and habitat as spawning area, the project will support the area and lake fisheries for future years. Current unprotected and degraded habitat will be enhanced and bolstered for long term sustainability and additional habitat will be created. These upgrades will attract and support a wide array of native species throughout the year that include not only fish but shorebirds and wetland plant species.

High water events are causing many negative side effects to this area including: major siltation, shoreline erosion, and degraded water quality. These are major concerns that need to be addressed soon to keep this area of the lake environmentally stable. With this grant funding, habitat that is degraded will get an immediate remedy preventing shoreline erosion and siltation, a critical factor to improving water quality in the area.

Communication & Education Value:

Due to the multiple partnerships involved in this project, the fisheries habitat improvement project will enhance communication and tighten bonds among all the stakeholders and partners involved. A critical element in this project is the ongoing relationship and communication with the Illinois Department of Natural Resources Department of Fisheries personnel to manage the lake and brood pond facilities.

The educational values associated with this project are endless. Local college and high school students will provide more than 160 volunteer hours toward the completion of the project. Student volunteers from the McKendree University Bass Fishing Team, the Carlyle High School Biology Club and Bass Fishing Team, and the Highland High School Bass Fishing Team will be participating in the project. The students will benefit from the opportunity to spend time in the outdoors and gain hands on experience in their related field of study while learning from trained professionals from agencies that specialize in environmental stewardship. Additionally, ISOP programs will be presented to schools in the region highlighting the importance of habitat and ecosystem management.

Innovativeness:

One of the strongest benefits of the fisheries habitat improvement project is its innovative approach to enhance the success of the James Hawn Brood Pond Access Area. This project is a cost effective way to improve fisheries habitat in a critical area of Carlyle Lake for many years. Through this project, Carlyle Lake will be able to accomplish work that is not funded in the operations and maintenance budget. By combining partner

contributions and a small investment from the Corps, Carlyle will be able to complete this much needed habitat improvement project while strengthening current partnerships and leveraging available funds.

Concluding statement:

Handshake funds used to support the fisheries habitat improvement project will provide incredible value and opportunity for handshake funds. Following the high water events during the summer of 2015, the area adjacent to the James Hawn Brood Pond Access Area outlet structure sustained major damage. If repairs are not made to this area in the near future, the system will not function as designed and all effectiveness and benefits will be lost. The funding and manpower needed to make the necessary repairs are not included in Carlyle Lake's future operations and maintenance budget. Funding through this partnership and handshake grant opportunity creates an alternative method to accomplish much needed improvements. This project is critical to the success and recruitment of fingerling fish that are released into the lake so that future generations of fisherman can enjoy the natural resources at Carlyle Lake.

Challenge Partnership Financial Work Sheet

Corps Project Name: Carlyle Lake Project Office

Work Project Title: Fisheries Habitat Improvement at James Hawn Brood Pond Access Area

POC Name: Robert Wilkins

Address: 801 Lake Road City: Carlyle State: IL Zip Code: 62231

Telephone: (618) 594-2484

Location of Project: James Hawn Brood Pond Access Area

Partner Organization 1: Illinois Department of Natural Resources (IDNR)

POC Name: Rob Maher – IDNR Reservoir Biologist

Address: One Confluence Way City: East Alton State: IL Zip Code: 62024

Telephone: (618) 468-2852

Partner Organization 2: Let's Talk Fishin'

POC Name: Alan Crocker

Address: 22135 East Road City: Carlyle State: IL Zip Code: 62231

Telephone: (618) 780-2504

Partner Organization 3: Bromley Excavating

POC Name: Kenny Bromley

Address: 481 Railroad Street City: Beckemeyer State: IL Zip Code: 62219

Telephone: (618) 227-8713

Partner Organization 4: McKendree University Bass Fishing Team

POC Name: Jon Rinderer

Address: 1115 Mt. Gilead Road City: Greenville State: IL Zip Code: 62246

Telephone: (618) 541-2177

Partner Organization 5: Highland High School Bass Fishing Club

POC Name: Jon Rinderer

Address: 1115 Mt. Gilead Road City: Greenville State: IL Zip Code: 62246

Telephone: (618) 541-2177

Partner Organization 6: Carlyle High School Bass Fishing Club

POC Name: Joe Wilkerson

Address: 1449 12th Street City: Carlyle State: IL Zip Code: 62231

Telephone: (618) 594-4493

Partner Organization 7: Lake Volunteers Association

POC Name: Kathy Niksic

Address: P.O. Box 23 City: Shelbyville State: IL Zip Code: 62565

Telephone: (217) 663-4138

Partner Organization 8:

POC Name:

Address: City: State: Zip Code:

Telephone: - - x

Partner Organization 9:

POC Name:

Address: City: State: Zip Code:

Telephone: - - x

Partner Organization 10:

POC Name:

Address: City: State: Zip Code:

Telephone: - - x

Partner Organization 11:

POC Name:

Address: City: State: Zip Code:

Telephone: - - x

Partner Organization 12:

POC Name:

Address: City: State: Zip Code:

Telephone: - - x

Partner Organization 13:

POC Name:

Address: City: State: Zip Code:

Telephone: - - x

Partner Organization 14:

POC Name:

Address: City: State: Zip Code:

Telephone: - - x

Partner Organization 15:

POC Name:

Address: City: State: Zip Code:

Telephone: - - x

Double click on spreadsheet to access data entry fields and to enter Partner names:

	Local Corps Office	Handshake Funds	Partner 1	Partner 2	Partner 3	Partner 4
Salaries	\$3,000	N/A	\$1,163	\$0	\$0	\$0
Travel	\$0	N/A	\$0	\$0	\$0	\$0
Materials and Supplies	\$1,000	\$10,000	\$0	\$0	\$0	\$0
Equipment Use	\$2,000	\$10,000	\$0	\$0	\$1,200	\$0
Funds Contributed	N/A	N/A	\$0	\$1,000	\$0	\$0
Personal Property	N/A	N/A	\$0	\$0	\$0	\$0
Volunteer	N/A	N/A	\$0	\$0	\$0	\$923
In-Kind Services	N/A	N/A	\$1,163	\$0	\$0	\$0
Other (explain below)	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$6,000	\$20,000	\$2,326	\$1,000	\$1,200	\$923
Share of Total Cost	17.3%	57.6%	6.7%	2.9%	3.5%	2.7%

	Partner 5	Partner 6	Partner 7	Partner 8	Partner 9	Partner 10
Salaries	\$0	\$0	\$0	\$0	\$0	\$0
Travel	\$0	\$0	\$0	\$0	\$0	\$0
Materials and Supplies	\$0	\$0	\$0	\$0	\$0	\$0
Equipment Use	\$0	\$0	\$0	\$0	\$0	\$0
Funds Contributed	\$0	\$0	\$500	\$0	\$0	\$0
Personal Property	\$0	\$0	\$0	\$0	\$0	\$0
Volunteer	\$923	\$1,846	\$0	\$0	\$0	\$0
In-Kind Services	\$0	\$0	\$0	\$0	\$0	\$0
Other (explain below)	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$923	\$1,846	\$500	\$0	\$0	\$0
Share of Total Cost	2.7%	5.3%	1.4%	0.0%	0.0%	0

	Partner 11	Partner 12	Partner 13	Partner 14	Partner 15	Total
Salaries	\$0	\$0	\$0	\$0	\$0	\$4,163
Travel	\$0	\$0	\$0	\$0	\$0	\$0
Materials and Supplies	\$0	\$0	\$0	\$0	\$0	\$11,000
Equipment Use	\$0	\$0	\$0	\$0	\$0	\$13,200
Funds Contributed	\$0	\$0	\$0	\$0	\$0	\$1,500
Personal Property	\$0	\$0	\$0	\$0	\$0	\$0
Volunteer	\$0	\$0	\$0	\$0	\$0	\$3,692
In-Kind Services	\$0	\$0	\$0	\$0	\$0	\$1,163
Other (explain below)	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$0	\$0	\$34,717
Share of Total Cost	0.0%	0.0%	0.0%	0.0%	0.0%	100%

Explanations:

James Hawn Brood Pond Enhancement Project Carlyle Lake, Clinton County, Illinois

James Hawn Brood Pond

Brood Pond Outfall Structure

P James Hawn Parking Lot

Habitat Islands- 20 to 30-feet in diameter, constructed from dredge material and capped with rip rap. The top elevation of the habitat islands will be constructed to elevation 450'. The islands will provide shelter to fingerling fish species released from the James Hawn brood pond as well as providing habitat for multiple fish species already within the lake.

Dredge Area/Channels- Mechanical dredging will be completed within the identified area to provide direct passage for fingerling fish species raised within James Hawn brood pond to the deeper waters and other sanctuary locations within Carlyle Lake. This cove of Carlyle Lake has experienced increased sedimentation and provides little to no water depth, specifically on low water years, when shallow water conditions persist. The channels will be dredged to approximately 20 to 25-feet in width and 6 to 8-feet in depth. The excavated dredge material will be used to construct the three habitat islands identified and the remaining dredge material will be placed on an upland agricultural field.

